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Remarks

In view of the following discussion, the applicants submit that none of the claims now pending in the application are anticipated under the provisions of 35 U. S. C § 102. Furthermore, the applicants believe that all of the claims satisfy the requirements of 35 U. S. C. § 112. Thus, the applicants believe that all of these claims are in allowable form.

OBJECTIONS

A. Specification

As requested by the Examiner, applicants have enclosed one copy of a substitute specification without markings and one copy with markings for the Examiner's review. Applicants have amended the specification to correct grammatical errors and unclear phrasing. The applicants submit that no new matter is added.

The Examiner also indicates that the specification fails to provide proper antecedent basis for the phrases "two end portions" and "a curved portion" recited on lines 10 and 11 of claim 1, respectively. The phrase "two end portions" refers to the ends 63 of electrode 25' (see, FIG. 5 and the substitute specification at page 4, lines 14-18). Each of the two ends 63 of electrode 25' is attached to a center planar portion 61 through "a curved portion" (see, FIG. 5).

In view of the above amendments and remarks, the basis for the Examiner's objection to the specification has been removed. As such, it is respectfully requested that this objection be withdrawn.

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B. Drawings

The Examiner has objected to FIGS. 2-4 as not including the legend "Prior Art". Applicant has amended FIGS. 2-4 to include the legend "Prior Art". Replacement sheets including FIGS. 2-4 are attached to this paper. Annotated sheets including FIGS. 2-4 showing the changes are also attached. No new matter has been added with these amendments to the figures.

In view of the above amendments, the basis for the Examiner's objection to the drawings has been removed. As such, it is respectfully requested that this objection be withdrawn.

C. Claims

The Examiner has objected to claims 1-2 because of informalities. In particular, the Examiner indicates that the phrase "the lateral skirt" lacks antecedent basis. The applicants have amended claims 1-2 to delete the term "lateral" from the phrase "the lateral skirt". As such, proper antecedent basis for the phrase "the skirt" is found at line 5 of claim 1. In view of these amendments, the basis for the Examiner's objection to claims 1-2 has been removed. Therefore, it is respectfully requested that this objection be withdrawn.

REJECTIONS

A. 35 U. S. C. § 112

1. Claims 1-3

Claims 1-3 stand rejected under 35 U. S. C. § 112, second paragraph as being indefinite. In particular, the Examiner indicates that the phrases "a substantially planar component" and "apertures" can be read to include the same

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element twice. Claim 1, at lines 3-4 recites the phrase "a dish-shaped control electrode comprising a substantially planar part provided with at least one aperture". The applicants have amended claim 1, at lines 10-11 to clarify that "the substantially planar of the control electrode part having a center portion drilled with the at least one aperture".

In view of the amendment to claim 1, the basis of the Examiner's rejection of claims 1-3 pursuant to 35 U. S. C. § 112 has been removed. As such, it is respectfully requested that this rejection be withdrawn.

B. 35 U. S. C. § 102

1. Claims 1-3 are not anticipated by Pohle

Claims 1-3 stand rejected under 35 U. S. C. § 102(b) as being anticipated by Pohle (U. S. Patent 2,582,454 issued January 15, 1952). The applicants submit that these claims are not anticipated by this reference.

Claims 1 is directed toward an electron gun for a cathode-ray tube (see, specification at page 1, line 11). The electron gun includes at least one cathode for emitting an electron beam and a dish-shaped control electrode 25' (see, FIG. 5 and the specification at page 2, lines 1-3). Cathode supports 56' support the cathode at a specified distance from the control electrode 25' (see, FIG. 5 and the specification at page 2, lines 6-7). The dish-shaped control electrode 25' is formed of at least three separate metal components: a substantially planar part 61 and two metal components 60, 66 forming a skirt (see, FIG. 5 and the specification at page 2, lines 8-13). The substantially planar part 61 has a center portion with at least one aperture 43' 44' for the passage of the electron beam emanating from the cathode and two end portions 63 (see, FIGS. 5-6 and the specification at pages 2, lines 3-6). The center portion of the planar part 61 is connected to the two end portions 63 through a curved portion (see, FIG. 5). The two metal components 60, 66 forming the skirt at least partially surround the

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cathode (see, FIG. 5 and the specification at page 2, lines 11-12). Ends of the two metal components 60, 66 overlap wherein the outer surface of one end of the two metal components faces the inner surface of the end of the other of the two components (see, FIG. 5 and the specification at page 4, lines 31-32). The two metal components 60, 66 each having periphery portions 62 extending outward from the cathode for attaching to the end portions 63 of the substantially planar part 61 (see, FIG. 5 and the specification at page 4, lines 25-28).

Pohle describes an electron gun of a cathode ray tube (see, Pohle at column 1, lines 1-3). The electron gun includes a cathode having a cap 18 on which emissive material 19 is located (see, Pohle at FIG. 3 and column 1, lines 62-63). The cathode is surrounded by a grid cylinder 11, that is capped by a disc 12 at one end (see, Pohle at FIG. 3 and column 1, lines 54-57). The disc 12 is clasped to the cylinder 11 with a ring 13 that matches a rib 14 on the cylinder 11 (see, Pohle at FIG. 3 and column 1, lines 57-60).

Pohle does not describe or suggest an electron gun including a dish-shaped control electrode formed of at least three separate metal components: a substantially planar part and two metal components forming a skirt where the two metal components forming the skirt at least partially surround a cathode and ends of the two metal components overlap such that the outer surface of one end of the two metal components faces the inner surface of the end of the other of the two components. Rather, Pohle teaches a completely different arrangement in which a cathode is surrounded by only two separate components: a grid cylinder that is capped with a disc where the disc is attached to the cylinder with a ring. Since Pohle does not teach an electron gun including a dish-shaped control electrode formed of at least three separate metal components: a substantially planar part and two metal components forming a skirt where the two metal components forming the skirt at least partially surround a cathode and ends of the two metal components overlap such that the outer surface of one end of the two metal components faces the inner surface of the end of the other of the two components, claim 1 is patentable over Pohle.

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Claims 2-3 depend directly from claim 1. In view of such dependence on claim 1, the applicants submit that claims 2-3 are also patentable over Pohle.

CONCLUSION

Thus, the applicants submit that none of the claims, presently in the application are anticipated under the provisions of 35 U. S. C. § 102. Furthermore, the applicants believe that all of these claims now satisfy the requirements of 35 U. S. C. § 112. Consequently, the applicants believe that all of the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Ms. Patricia A. Verlangieri, at (609) 734-6867, so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,


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